



Tennessee Department of Environment and Conservation  
Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243  
1-888-891-8332 (TDEC)

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SEP 30 2015

**Municipal Separate Storm Sewer System (MS4) Annual Report**

ENVIRONMENT & CONSERVATION  
COOKEVILLE FIELD OFFICE

**1. MS4 INFORMATION**

City of Crossville TNS079987  
Name of MS4 MS4 Permit Number  
Heath Blaylock heath.blaylock@crossvilletn.gov  
Name of Contact Person Email Address

931-456-6947  
Telephone (including area code)

392 N. Main St.  
Mailing Address

Crossville TN 38555  
City State ZIP code

What is the current population of your MS4? 11,200

What is the reporting period for this annual report? From 2014 to 2015

**2. WATER QUALITY PRIORITIES (SECTION 3.1)**

- A. Does your MS4 discharge into waters listed as impaired on TN's most current 303(d) list and/or according to the on-line GIS mapping tool? ☒ Yes ☐ No
- B. If yes, please attach a list all impaired waters within your jurisdictional area.
- C. Does your MS4's jurisdictional area contain any waterbodies where a TMDL has been approved for parameters other than pathogens, siltation and habitat alterations? If yes, please attach a list. ☐ Yes ☒ No
- D. Does your MS4 discharge to any Exceptional TN Waters (ETWs) or Outstanding National Resource Waters (ONRWs)? If yes, please attach a list. ☒ Yes ☐ No
- E. Are you implementing additional specific provisions to ensure the continued integrity of ETWs or ONRWS located within your jurisdiction? ☒ Yes ☐ No

**3. PROTECTION OF STATE OR FEDERALLY LISTED SPECIES (SECTION 3.2.1 General Permit for Phase II MS4s)**

- A. Are there any state or federally listed species within the MS4's jurisdiction? ☒ Yes ☐ No
- B. Are any of the MS4 discharges or discharge-related activities likely to jeopardize any state or federally listed species? ☐ Yes ☒ No
- C. Please attach any authorizations or determinations by U.S. Fish & Wildlife Service on the effect of the MS4 discharges on state or federally listed species.

**4. PUBLIC EDUCATION AND PUBLIC PARTICIPATION (SECTION 4.2.1 AND 4.2.2)**

- A. Have you developed a Public Information and Education plan (PIE)? ☒ Yes ☐ No
- B. Is your public education program targeting specific pollutants and sources of those pollutants, such as Hot Spots? ☒ Yes ☐ No
- C. If yes, what are the specific causes, sources and/or pollutants addressed by your public education program? Silt

## Municipal Separate Storm Sewer System (MS4) Annual Report

- D. Note specific successful outcome(s) (NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period. Stormwater is a common word now in this community. A few years back nobody especially contractors, knew what stormwater meant. Now its a common thing that everyone notices and strives to improve.
- E. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? ☒ Yes ☐ No
- F. How do you facilitate, advertise, and publicize public involvement and participation opportunities? Brochures in water bills, pamphlet hand outs to contractors. New for this year we will be trying radio advertisement.
- G. Do you have a webpage dedicated to your stormwater program? ☒ Yes ☐ No  
If so, what is the link/URL:  
<http://www.crossvilletn.gov/index.php/departments/engineering-planning/stormwater-ms4-program>
- H. Are you tracking and maintaining records of public education, outreach, involvement and participation activities? Please attach a summary of these activities. ☒ Yes ☐ No

### 5. ILLICIT DISCHARGE DETECTION AND ELIMINATION (SECTION 4.2.3)

- A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? ☒ Yes ☐ No
- B. Have you completed a map of all storm drain pipes of storm sewer system? ☒ Yes ☒ No
- C. How many outfalls have you identified in your system? 500
- D. Have any of these outfalls been screened for dry weather discharges? ☒ Yes ☐ No
- F. What is your frequency for screening outfalls for illicit discharges? Annually
- G. Do you have an ordinance that effectively prohibits illicit discharges? ☒ Yes ☐ No
- H. During this reporting period, how many illicit discharges/illegal connections have you discovered (or been reported to you)? 2
- I. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? 2

### 6. CONSTRUCTION SITE STORMWATER RUNOFF (SECTION 4.2.4)

- A. Do you have an ordinance or adopted policies stipulating:
- |  |   |                             |
|--|---|-----------------------------|
| Erosion and sediment control requirements?           | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Other construction waste control requirements?       | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Requirement to submit construction plans for review? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| MS4 enforcement authority?                           | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
- B. How many active construction sites disturbing at least one acre were there in your jurisdiction this reporting period? (14)
- C. How many of these active sites did you inspect this reporting period? (11) 3 sites have not started work
- D. On average, how many times each, or with what frequency, were these sites inspected (e.g., weekly, monthly, etc.)? Twice weekly and after every rain event.
- E. Do you prioritize certain construction sites for more frequent inspections? ☒ Yes ☐ No

## Municipal Separate Storm Sewer System (MS4) Annual Report

If Yes, based on what criteria? Location to impaired waters and type of construction

### 7. PERMANENT STORMWATER CONTROLS (SECTION 4.2.5)

A. Do you have an ordinance or other mechanism to require:

Site plan reviews of all new and re-development projects? ☒ Yes ☐ No

Maintenance of stormwater management controls? ☒ Yes ☐ No

Retrofitting of existing BMPs with green infrastructure BMPs? ☐ Yes ☒ No

B. What is the threshold for new/redevelopment stormwater plan review? (e.g., all projects, projects disturbing greater than one acre, etc.) Projects disturbing more than one acre and any commercial project no matter the size.

C. Have you implemented and enforced performance standards for permanent stormwater controls? ☐ Yes ☒ No

D. Do these performance standards go beyond the requirements found in Section 4.2.5.2 and require that pre-development hydrology be met for:

Flow volumes ☒ Yes ☐ No

Peak discharge rates ☒ Yes ☐ No

Discharge frequency ☒ Yes ☐ No

Flow duration ☒ Yes ☐ No

E. Please provide the URL/reference where all permanent stormwater management standards can be found.

(N/A) the City of Crossville was approved for a year extension for permanent stormwater management program.

F. How many development and redevelopment project plans were reviewed for this reporting period? N/A

G. How many development and redevelopment project plans were approved? N/A

H. How many permanent stormwater management practices/facilities were inspected? N/A

I. How many were found to have inadequate maintenance? N/A

J. Of those, how many were notified and remedied within 30 days? (If window is different than 30 days, please specify) N/A

K. How many enforcement actions were taken that address inadequate maintenance? 0

L. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? ☒ Yes ☐ No

M. Do all municipal departments and/or staff (as relevant) have access to this tracking system? ☒ Yes ☐ No

N. Has the MS4 developed a program to allow for incentive standards for redeveloped sites? ☐ Yes ☒ No

O. How many maintenance agreements has the MS4 approved during the reporting period? 1

### 8. CODES AND ORDINANCES REVIEW AND UPDATE (SECTION 4.2.5.3)

A. Is a completed copy of the EPA Water Quality Scorecard submitted with this report? ☐ Yes ☒ No

B. Include status of implementation of code, ordinance and/or policy revisions associated with permanent stormwater management. N/A an Ordinance is still in the works since we were granted and extension

### 9. STORMWATER MANAGEMENT FOR MUNICIPAL OPERATIONS (SECTION 4.2.6)

## Municipal Separate Storm Sewer System (MS4) Annual Report

- A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for:
- |   |   |                             |
|---|---|-----------------------------|
| All parks, ball fields and other recreational facilities            | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal turf grass/landscape management activities            | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal vehicle fueling, operation and maintenance activities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal maintenance yards                                     | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All municipal waste handling and disposal areas                     | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
- B. Are stormwater inspections conducted at these facilities? ☒ Yes ☐ No
1. If Yes, at what frequency are inspections conducted? Annually or as needed.
- C. Have standard operating procedures or BMPs been developed for all MS4 field activities? (e.g., road repairs, catch basin cleaning, landscape management, etc.) ☒ Yes ☐ No
- D. Do you have a prioritization system for storm sewer system and permanent BMP inspections? ☒ Yes ☐ No
- E. On average, how frequently are catch basins and other inline treatment systems inspected? Annually
- F. On average, how frequently are catch basins and other inline treatment systems cleaned out/maintained? As needed. We run a sweeper truck every night to clean roads and gutters
- G. Do municipal employees in all relevant positions and departments receive comprehensive training on stormwater management? ☒ Yes ☐ No
- H. If yes, do you also provide regular updates and refreshers? ☒ Yes ☐ No
- If so, how frequently and/or under what circumstances? We do refreshers or new courses as time allows us. We like to get someone every year to take the level 1 Stormwater class. There is now 10 City employees with the level 1 Certification.

### 10. STORMWATER MANAGEMENT PROGRAM UPDATE (SECTION 4.4)

- A. Describe any changes to the MS4 program during the reporting period including but not limited to:
- Changes adding (but not subtracting or replacing) components, controls or other requirements (Section 4.4.2.a). Changing our buffers for streams from 25ft to 30ft to meet state requirements.
- Changes to replace an ineffective or unfeasible BMP (Section 4.4.2.b). No changes.
- Information (e.g. additional acreage, outfalls, BMPs) on program area expansion based on annexation or newly urbanized areas. A total of 84 acres of annexation
- Changes to the program as required by the division (Section 4.4.3). Developing Permanent Stormwater Ordinance

### 11. EVALUATING/MEASURING PROGRESS

- A. What indicators do you use to evaluate the overall effectiveness of your Stormwater Management Program, how long have you been tracking them, and at what frequency? Note that these are not measurable goals for individual BMPs or tasks, but large-scale or long-term metrics for the overall program, such as in-stream macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

Indicator	Began Tracking (year)	Frequency	Number of Locations
<i>Example: E. coli</i>	2003	Weekly April–September	20
Benthics	2011	Annually	6

## Municipal Separate Storm Sewer System (MS4) Annual Report

E.coli	2011	5 Samples	6
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B. Provide a summary of data (e.g., water quality information, performance data, modeling) collected in order to evaluate the performance of permanent stormwater controls installed throughout the system. This evaluation may include a comparison of current and past permanent stormwater control practices. We are comparing visual stream data from Obed Watershed Community to the City of Crossvilles assessment to determine how new subdivision and roads are impacting our streams and tributaries.

### 12. ENFORCEMENT (SECTION 4.5)

A. Identify which of the following types of enforcement actions you used during the reporting period, indicate the number of actions, the minimum measure (e.g., construction, illicit discharge, permanent stormwater control) or note those for which you do not have authority:

Action	Construction	Permanent Stormwater Controls	Illicit Discharge	Authority?	
Notice of violation	# <u>3</u>	# <u>0</u>	# <u>1</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Administrative fines	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Stop Work Orders	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Civil penalties	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Criminal actions	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Administrative orders	# <u>0</u>	# <u>0</u>	# <u>0</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Other _____	# <u>0</u>	# <u>0</u>	# <u>0</u>		

B. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions in your jurisdiction? ☒ Yes ☐ No

C. What are the 3 most common types of violations documented during this reporting period? Failure to install proper BMP's, Stabilization Requirements, Reporting.

### 13. PROGRAM RESOURCES (OPTIONAL)

A. What was your annual expenditure to implement the requirements of your MS4 NPDES permit and SWMP this past reporting period? \$165,370.00

B. What is next year's budget for implementing the requirements of your MS4 NPDES permit and SWMP? \$138,325.00

C. Do you have an independent financing mechanism for your stormwater program? ☐ Yes ☒ No

D. If so, what is it/are they (e.g., stormwater fees), and what is the annual revenue derived from this mechanism?

Source: N/A

Amount \$

Source: N/A

Amount \$

E. How many full time employees does your municipality devote to the stormwater program (specifically for implementing the stormwater program vs. municipal employees with other primary responsibilities that dovetail with stormwater issues)? 2

## Municipal Separate Storm Sewer System (MS4) Annual Report

F. Do you share program implementation responsibilities with any other entities? ☐ Yes ☒ No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism
N/A		
N/A		
N/A		

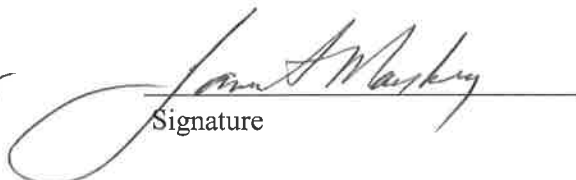
G. Please attach a copy of your Organizational Chart

### 14. CERTIFICATION

**This report must be signed by a ranking elected official or by a duly authorized representative of that person. See signatory requirements in sub-part 6.7.2 of the permit.**

*"I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."*

James S. Mayberry, Mayor  
Printed Name and Title

  
Signature

9-28-15  
Date

**Annual reports must be submitted in accordance with the requirements of Section 5.4. (Reporting) of the permit. Annual reports must be submitted to the appropriate Environmental Field Office (EFO) by September 30 of each calendar year, as shown in the table below:**

EFO	Street Address	City	Zip Code	Telephone
Chattanooga	540 McCallie Avenue STE 550	Chattanooga	37402	(423) 634-5745
Columbia	1421 Hampshire Pike	Columbia	38401	(931) 380-3371
Cookeville	1221 South Willow Ave.	Cookeville	38506	(931) 432-4015
Jackson	1625 Hollywood Drive	Jackson	38305	(731) 512-1300
Johnson City	2305 Silverdale Road	Johnson City	37601	(423) 854-5400
Knoxville	3711 Middlebrook Pike	Knoxville	37921	(865) 594-6035
Memphis	8383 Wolf Lake Drive	Bartlett	38133	(901) 371-3000
Nashville	711 R S Gass Boulevard	Nashville	37216	(615) 687-7000

### **Town Branch**

Field Parameters: (August 2015)

pH 7.61

DO 11.3

T 70.2 Degrees Farenheit

EC 190

Turbidity 210

**Flow 1.20 cfs**

### **One Mile Creek**

Field Parameters: (August 2015)

pH 7.66

DO 9.6

T 69.0 Degrees Farenheit

EC 153

Turbidity 195

**Flow 2.20 cfs**

**Little Obed**

Field Parameters: (August 2015)

pH 7.49

DO 10.3

T 72.5 Degrees Farenheit

EC 228

Turbidity 122

**Flow 3.2 cfs**

**Byrd Creek**

Field Parameters: (August 2015)

pH 7.6

DO 8.8

T 75.0 Degrees Farenheit

EC 239

Turbidity 145

**Flow 6.4 cfs**



**Obed River**

Field Parameters: (August 2015)

pH 7.7

DO 8.80

T 68.2 Degrees Farenheit

EC 103

Turbidity 80

**Flow 9.2 cfs**

**Spiers Branch**

Field Parameters: (August 2015)

pH 7.80

DO 10.9

T 72.6 Degrees Farenheit

EC 221

Turbidity 180

**Flow 1.70 cfs**

# City of Crossville – Stormwater Department

## E-Coli Bacteria – IDEXX COLILERT METHOD

Date Sample Collected 9-8-15 Time 3:00

Sample Collected by Zach Goss

Sample Source \_\_\_\_\_

Sample Set Up Date 9-8-15 Time 3:25 p.m. Analyst DKD

Sample Take Out Date 9-9-15 Time 2:25 pm Analyst kh

	<u>Sample Vol</u>	<u>Positive Large Cells</u>	<u>Positive Small Cells</u>	<u>MPN</u>
Sample 1 Location <u>Little Obed</u>	<u>100ml</u>	<u>38</u>	<u>4</u>	<u>74.9</u>
Sample 2 Location <u>Obed River</u>	<u>100ml</u>	<u>48</u>	<u>12</u>	<u>193.5</u>
Sample 3 Location <u>One Mile Creek</u>	<u>100ml</u>	<u>49</u>	<u>21</u>	<u>365.4</u>
Sample 4 Location <u>Byrd Creek</u>	<u>100ml</u>	<u>42</u>	<u>6</u>	<u>98.8</u>
Sample 5 Location <u>Town Branch</u>	<u>100ml</u>	<u>49</u>	<u>47</u>	<u>2419.6</u>
Sample 6 Location <u>Spiers Branch</u>	<u>100ml</u>	<u>49</u>	<u>39</u>	<u>1046.2</u>

# City of Crossville – Stormwater Department

## E-Coli Bacteria – IDEXX COLILERT METHOD

Date Sample Collected 9-2-15 Time 2:48 p.m.

Sample Collected by Zack Goss

Sample Source \_\_\_\_\_

Sample Set Up Date 9-2-15 Time 3:00 p.m. Analyst JKD

Sample Take Out Date 9-3-15 Time 2:40 p.m. Analyst JKD

	<u>Sample Vol</u>	<u>Positive Large Cells</u>	<u>Positive Small Cells</u>	<u>MPN</u>
Sample 1 Location <u>Little Obed</u>	<u>100ml</u>	<u>43</u>	<u>10</u>	<u>118</u>
Sample 2 Location <u>Obed River</u>	<u>100ml</u>	<u>38</u>	<u>11</u>	<u>91</u>
Sample 3 Location <u>One Mile Creek</u>	<u>100ml</u>	<u>6</u>	<u>1</u>	<u>7</u>
Sample 4 Location <u>Byrd Creek</u>	<u>100ml</u>	<u>48</u>	<u>18</u>	<u>249</u>
Sample 5 Location <u>Town Branch</u>	<u>100ml</u>	<u>49</u>	<u>38</u>	<u>980</u>
Sample 6 Location <u>Spier's Branch</u>	<u>100ml</u>	<u>41</u>	<u>13</u>	<u>113</u>

# City of Crossville – Stormwater Department

## E-Coli Bacteria – IDEXX COLILERT METHOD

Date Sample Collected 8-27-15 Time 2:40 pm

Sample Collected by Heath Blaylock

Sample Source \_\_\_\_\_

Sample Set Up Date 8/27/15 Time 2:50 p Analyst kh

Sample Take Out Date 8/28/15 Time 2:10 p Analyst kh

	<u>Sample Vol</u>	<u>Positive Large Cells</u>	<u>Positive Small Cells</u>	<u>MPN</u>
Sample 1 Location <u>Little Obed</u>	<u>100mL</u>	<u>39</u>	<u>20</u>	<u>120</u>
Sample 2 Location <u>Obed River</u>	<u>100mL</u>	<u>46</u>	<u>10</u>	<u>146</u>
Sample 3 Location <u>One Mile Creek</u>	<u>100mL</u>	<u>49</u>	<u>16</u>	<u>275</u>
Sample 4 Location <u>Byrd Creek</u>	<u>100m</u>	<u>22</u>	<u>5</u>	<u>35</u>
Sample 5 Location <u>Town Branch</u>	<u>100mL</u>	<u>49</u>	<u>36</u>	<u>866</u>
Sample 6 Location <u>Spiers Branch</u>	<u>100mL</u>	<u>45</u>	<u>11</u>	<u>139</u>

# City of Crossville – Stormwater Department

## E-Coli Bacteria – IDEXX COLILERT METHOD

Date Sample Collected 8-31-15 Time 3:00

Sample Collected by Zach Goss

Sample Source \_\_\_\_\_

Sample Set Up Date 8/31/15 Time 3:23 p.m Analyst JKD

Sample Take Out Date 9-1-15 Time 3:30 pm Analyst Kh

	<u>Sample Vol</u>	<u>Positive Large Cells</u>	<u>Positive Small Cells</u>	<u>MPN</u>
Sample 1 Location <u>Little Obed</u>	<u>100mL</u>	<u>38</u>	<u>6</u>	<u>79.4</u>
Sample 2 Location <u>Obed River</u>	<u>100mL</u>	<u>24</u>	<u>4</u>	<u>37</u>
Sample 3 Location <u>One Mile Creek</u>	<u>100mL</u>	<u>6</u>	<u>6</u>	<u>12</u>
Sample 4 Location <u>Byrd Creek</u>	<u>100mL</u>	<u>49</u>	<u>48</u>	<u>&gt;2419</u>
Sample 5 Location <u>Town Branch</u>	<u>100mL</u>	<u>49</u>	<u>48</u>	<u>&gt;2419</u>
Sample 6 Location <u>Spiers Branch</u>	<u>100mL</u>	<u>33</u>	<u>7</u>	<u>63</u>

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COOKEVILLE FIELD OFFICE

## City of Crossville – Stormwater Department

## E-Coli Bacteria – IDEXX COLILERT METHOD

Date Sample Collected 8-25-15 Time 12:00Sample Collected by Heath Blaylock + Zach Goss

Sample Source \_\_\_\_\_

Sample Set Up Date 8-25-15 Time 12:30 p.m. Analyst JRDSample Take Out Date 8-26-15 Time 12:09 p.m. Analyst JRD

	<u>Sample Vol</u>	<u>Positive Large Cells</u>	<u>Positive Small Cells</u>	<u>MPN</u>
Sample 1 Location <u>Little Obed</u>	<u>100ml</u>	<u>38</u>	<u>8</u>	<u>84</u>
Sample 2 Location <u>Obed River</u>	<u>100ml</u>	<u>49</u>	<u>32</u>	<u>687</u>
Sample 3 Location <u>One Mile Creek</u>	<u>100ml</u>	<u>47</u>	<u>15</u>	<u>192</u>
Sample 4 Location <u>Byrd Creek</u>	<u>100ml</u>	<u>29</u>	<u>7</u>	<u>53</u>
Sample 5 Location <u>Town Branch</u>	<u>100ml</u>	<u>49</u>	<u>45</u>	<u>1,733</u>
Sample 6 Location <u>Spiers Branch</u>	<u>100ml</u>	<u>49</u>	<u>18</u>	<u>308</u>

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## Endangered Species within The City of Crossville's Urban Growth Boundary

Cumberland	Invertebrate Animal	Zoological	<u>Villosa perpurpurea</u>	Purple Bean
Cumberland	Invertebrate Animal	Zoological	<u>Cambarus pristinus</u>	Pristine Crayfish
Cumberland	Vascular Plant	Botanical	<u>Platanthera integrilabia</u>	White Fringeless Orchid
Cumberland	Vascular Plant	Botanical	<u>Potamogeton tennesseensis</u>	Tennessee Pondweed
Cumberland	Vascular Plant	Botanical	<u>Conradina verticillata</u>	Cumberland Rosemary
Cumberland	Vascular Plant	Botanical	<u>Calamovilfa arcuata</u>	Cumberland Sand-Grass

Indiana bat (Myotis sodalis) Entire Endangered Bloomington Ecological Services Field Office Indiana Bat (Myotis sodalis) Draft Recovery Plan: First Revision

Northern Long-Eared Bat (Myotis septentrionalis) Threatened Twin Cities Ecological Services Field Office

## New Level 1 Erosion and Sediment Control Certified 2015

Jeff Brewer	Maintenance Lead Worker
Tom Turner	Engineering Assistant
Steve Powell	Maintenance Supervisor
Tim Bolin	Street Department Lead Worker
Stuart Hale	Street Maintenance
Zach Goss	Engineering Tech Assistant

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Tennessee Exceptional waters within the City limits of Crossville

6010208	Emory	Stillhouse Creek	Cumberland	Portion in Cumberland Mountain State Park.	Cumberland Mountain State Park	35.894	-85.0343
6010208	Emory	Threemile Creek including tributaries	Cumberland	Entirely including tributaries and headwater branches.	Cumberland Mountain State Park, exceptional biological diversity. Evaluation worksheet completed by	35.9177	-85.0461
6010208	Emory	Byrd Creek including unnamed tributaries in Cumberland Mountain State Park	Cumberland	Portion in Cumberland Mountain State Park including unnamed tributaries.	Cumberland Mountain State Park	35.8934	-84.9922
6010208	Emory	Byrd Lake	Cumberland	Within Cumberland Mountain SP.	Cumberland Mountain SP	35.8948	-85.9997
6010208	Emory	Coon Hollow Branch	Cumberland	Portion in Cumberland Mountain State Park.	Cumberland Mountain State Park	35.897	-85.004
6010208	Emory	Little Obed River	Cumberland	Approximately 0.3 mile upstream Genesis Road to origin.	State threatened Zigzag Bladderwort and Brown Bog Sedge.	35.9684	-84.9985
6010208	Emory	Lake Holiday Unnamed Tributary	Cumberland	From northwest corner of Lake Holiday to origin.	State threatened Brown Bog Sedge	35.9559	-85.0793
6010208	Emory	Little Obed Creek	Cumberland	Entirety	State threatened Zigzag Bladderwort.	35.9769	-84.9897

## **303d List**

**TN06010208015 – 0900**

### **BYRD CREEK**

Cumberland

32.01 Miles

Low Dissolved Oxygen (L)

Upstream Impoundment

Category 5 (impaired for one or more uses).

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**TN06010208015 – 0930**

### **ONE MILE CREEK**

Cumberland

8.5 Miles

Loss of biological integrity due to siltation (NA) Escherichia coli (M)

Land Development Collection System Failure

Category 5. EPA approved a siltation TMDL that addresses some of the known pollutants.

**TN06010208013 – 2000**

### **OBED RIVER**

Cumberland

1.48 Miles

Flow Alteration (NA) Physical Substrate Habitat Alterations (NA)

Discharges from MS4 area Upstream Impoundment

Below Lake Holiday near Crossville. Category 4A, but flow alteration is 4c (impact not caused by a pollutant). EPA approved a habitat alteration TMDL that addresses the known pollutant.

## **303d List**

**TN06010208013 – 0200**

### **LITTLE OBED RIVER**

Cumberland

7.96 Miles

Total Phosphorus Nitrate+Nitrite (M) Loss of biological integrity due to siltation (NA) Escherichia coli (M)

Discharges from MS4 area Collection System Failure

Category 5. EPA approved a siltation TMDL that addresses some of the known pollutants

**TN06010208013\_0310**

### **Spiers Creek**

Cumberland

2.4 Miles

**TN06010208013\_0300**

### **Town Creek**

Cumberland

1.5 Miles

## **Public Education and Outreach**

**2015**

Sponsored Cumberland Mtn State Park Trail Run

Online Weather Stations for Public and Schools

Crossville Sustainability Fair

Joining Obed River Watershed Association for a stream clean up in 2015

WaterFest at Meadow Park Lake